

Before the
FEDERAL COMMUNICATIONS COMMISSION
 Washington DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)

Calling Party Pays Service Offering)
 in the Commercial Mobile Radio Services)

WT Docket No. 97-207

Comments of Illuminet, Inc.

Illuminet, Inc. ("Illuminet")¹ hereby files these comments in response to the July 7, 1999 Declaratory Ruling and Notice of Proposed Rulemaking ("NPRM") issued by the Federal Communications Commission ("Commission" or the "FCC") in the above captioned matter.² Illuminet comments solely on the issues raised by the NPRM with respect to message routing and billing and collection ("B&C").³ Illuminet respectfully submits that the policy goal of

¹ Illuminet provides a wide variety of services to local exchange carriers, interexchange carriers, wireless carriers and competitive local exchange carriers. Illuminet's services include Signaling System No. 7 ("SS7") network functions and related line information database ("LIDB") services, calling card billing validation services, 800 RESPOG services and revenue administration, and other related database services. In addition, Illuminet has provided billing and collection clearinghouse services since the mid-1980's. Illuminet also actively addresses telecommunication issues by participating in associations and forums such as the Cellular Telecommunications Industry Association, the National Calling Party Pays Forum, the Carrier Liaison Committee, the National Services Advisory Committee, and the Ordering and Billing Forum. With respect to wireless related activities, Illuminet also provides services to assist Commercial Mobile Radio Service ("CMRS") providers in establishing roaming arrangements and in managing arrangements for seamless roaming in new markets.

² In the Matter of Calling Party Pays Service Offering in the Commercial Mobile Radio Services, Declaratory Ruling and Notice of Proposed Rulemaking, WT Docket No. 97-207, FCC 99-137, released July 7, 1999. The comment and reply comment dates were extended by the FCC to September 17, 1999 and October 18, 1999, respectively. See In the Matter of Calling Party Pays Service Offering in the Commercial Mobile Radio Services, Order Extending Comments and Reply Comment Period, WT Docket No. 97-207, DA 99-1566, released August 6, 1999.

³ See, e.g., NPRM at para. 61.

encouraging the availability of demand-based Calling Party Pays ("CPP") can best be achieved by minimizing "leakage," i.e., the risk of unbillables.⁴ Illuminet continues to believe that a LIDB-based solution⁵ can readily address the technical issues required for the controlling CPP unbillables. The domestic LIDB platform in use today would require only minor technical refinements to achieve this objective. These refinements avoid the technical constraints associated with dedicated NXXs and line class restrictions to address PBX and Centrex call restriction, and would otherwise avoid imposing considerable financial burdens on carriers, including small and independent telephone companies. Finally, Illuminet believes that the experience of the interexchange B&C market demonstrates that there is no need, at this time, for imposing new regulatory requirements on CPP B&C services. Rather, Illuminet submits that market forces for CPP B&C services will ensure that there are options available for the billing of CPP services where market demand for the service is present.

I. Reliance on the LIDB Platform, with Minor Refinements, will Ensure that the Provision of CPP Minimizes Unbillables

Although today wireline carriers are the primary users of LIDB for call processing, Illuminet believes that the existing LIDB infrastructure, with minor modifications, can provide the information necessary for proper message routing and billing for CPP calls. The ability to

⁴ Generally, unbillables result when billing processes of pre-billing edits and other quality checks reject messages. Pre-billing edits typically check the validity of the message format, the validity of data values in specific data fields, guidelines concerning the allowable maximum age of the message, and most importantly in the case of CPP, whether the message can be "guided" to a billable customer account.

⁵ See, e.g., Comments of Illuminet, Inc., WT Docket No. 97-207, filed December 16, 1997.

route and bill a CPP call properly will, in turn, make the service more viable where demand for it exists.

Based on its participation in industry discussions concerning CPP, Illuminet believes that proper billing for CPP will be greatly assisted by making two refinements in the existing LIDB platform. Consistent with the Telcordia GR 1158 standards, the necessary refinements would be limited to the provision of additional screening information for the terminating number via Terminating Line Number Screening ("TLNS"), and for the originating number, minor modifications to Originating Line Number Screening ("OLNS"). Utilization of these existing screening technologies via LIDB will permit the affected carriers to have access to the necessary routing and billing information regarding both originating and terminating parties, thereby minimizing the risk of unbillables.

TLNS and OLNS, with minor modifications, could be used to ensure that the information necessary for proper billing of CPP calls is available to the wireless carrier. In particular, TLNS provides a possible means for the wireless carrier to determine if the terminating station (called party) is a CPP subscriber. If this information is available to the terminating wireless carrier, it can initiate the special processing associated with a CPP call, including billing checks on the originating station as the carrier may deem necessary or desirable. By examining the Originating Billing/Service Indicators (information that already exists in most of or all of the domestic LIDBs today) or by reviewing additional codes provided in the OLNS query response to support CPP, the wireless carrier would be able to determine whether the originating station is not a billable station (e.g., a public paystation) and elect not to complete the call or provide the caller a workable alternative billing option. Moreover, the use of TLNS/OLNS information

would eliminate the need to address call restrictions associated with a PBX or Centrex line⁶ by allowing the line restriction status to be provided in the query response from the LIDB.

Illuminet also notes that this technical solution to CPP unbillable issues is not limited solely to LIDB applications. Although wireless Number Portability ("NP") is not required until 2002, Illuminet submits that the same basic routing and billing information necessary of demand-based CPP is currently available as a standard in the NP databases, and can be adapted to support the additional information necessary for wireless carriers to process CPP calls when NP is offered. Accordingly, the NP process, as it exists today for wireline carriers, provides a natural location to determine the services of a called party including whether that customer is a wireless customer (which, in turn, triggers CPP service and the attendant billing issues).

Illuminet believes that dedicated numbers for CPP subscribers are not necessary and are not in the public interest.⁷ In addition to potentially exacerbating the number exhaust problem, the use of dedicated numbers also may restrict the availability of integrated services to customers in the event that each service, such as CPP, requires its own number group. Unlike services such as 8XX, 500, 700 and 900 which use dedicated numbers that are then translated to normal plain old telephone service ("POTS") numbers for call routing and termination, the wireless operational environment requires identification of the home carrier's Home Location Register ("HLR") as part of the process of extending service to the wireless subscriber. Call routing and termination is accomplished via the Mobile Identification Number ("MIN") which is also the

⁶ See NPRM at para. 46.

⁷ See *id.* at para. 48.

subscriber's telephone number. Dedicated numbers that are not unique to a specific carrier could compromise today's use of the MIN which, in turn, could adversely affect call routing terminations as well as access to the HLR. Although NP may alleviate this concern, its availability is much too distant.

Accordingly, while enhancements may be required to accommodate the specific requirements of CPP, the fundamental technology exists and is proven. With minor refinements to the LIDB platform to include the use of TLNS and OLNS information, CPP unbillable issues can be minimized.

II. The Commission Should Rely on Market Forces for the Provision of CPP B&C Services

CPP, to be successful, will require an effective billing mechanism. Based upon the experience of the interexchange B&C marketplace, Illuminet respectfully submits that additional Commission oversight is not necessary for CPP B&C. Accordingly, Illuminet agrees with those commenters that contend that the Commission should rely upon market forces for the provision of CPP B&C services, intervening only if those market forces do not offer B&C options to wireless carriers.⁸

Assuming CPP charges to the calling party will be based on a usage-sensitive revenue model, a CPP B&C billing mechanism will require the following functions: 1) usage measurement, 2) call recording, 3) message assembly, edit, and rating, 4) bill rendering, 5) collection, and 6) customer service, notably inquiry service. Although there is still debate with respect to how these functions will be provided for a CPP call, Illuminet believes that

⁸ See id. at para. 58.

Commission intervention into this debate is not necessary at this time. As demonstrated by the market for interexchange B&C services, the industry has previously shown that it can resolve these types of issues without regulatory intervention.

In today's environment, interexchange carriers have numerous billing options available to them. These billing options fall into three major categories: direct billing,⁹ LEC B&C,¹⁰ and third party billing.¹¹ The current interexchange telecommunications market utilizes all three general billing models to varying degrees. Each model has differing technical requirements impacting both the network - to support proper usage measurement and call recording - and the downstream billing systems and processes. Even with these challenges, however, the interexchange telecommunications market has successfully spurred the creation of these options without unnecessary regulatory involvement. In fact, the telecommunications billing, collection and customer care industry is a thriving business in its own right, growing worldwide from roughly \$10 billion in 1997 to an estimated \$14 billion by 2000, generating a

⁹ Direct billing is a system where the interexchange carrier performs all billing functions utilizing in-house resources, third party subcontractors, or a combination. In cases where the carrier does not possess direct knowledge of the customer's name and address, the carrier may request Billing Name and Address from the Local Exchange Carrier ("LEC") or secure it from another source. Variations on the direct billing option exist, including the use of third party "collection houses" and pre-paid options.

¹⁰ LEC B&C is where the wireline carrier performs all the functions to create a billable record and transmits the billable records, either directly or through a third-party clearinghouse, to the appropriate LEC for inclusion on the LEC's monthly invoice to the customer. The interexchange carrier then settles net amounts owing among itself, the respective LECs and any clearinghouse.

¹¹ Third-party billing is where the interexchange carrier performs all the functions to create a billable record and forwards the data to a third party who then bills the customer and handles all billing and collection functions. The predominant example is credit card billing.

compound annual growth rate of 13 percent. The third-party service provider segment of the billing, collection and customer care industry is expected to grow even faster at a compound annual growth rate of 30 percent during the same period.¹²

Based on the experience of the interexchange B&C market, Illuminet submits that there is no rational basis to believe the CPP market will have its B&C service options limited. Entities (such as Illuminet) that offer B&C services and clearinghouse functions for both wireless and wireline carriers have financial incentives to ensure that CPP B&C services are offered where market demand is present, particularly since the development of the wireless telecommunications market may be a significant contributor to the projected growth in the billing and customer care industry. Moreover, Illuminet believes that market forces will cause wireless carriers and LECs to facilitate workable B&C services. For certain wireless carriers offering CPP, there may be justifiable business reasons why LEC B&C arrangements are not in their interest. Likewise, certain LECs may choose to not offer CPP billing to wireless carriers due to strategic or other business reasons. For example, a LEC may decide not to offer, or cease offering, a CPP billing service due to excessive subscriber complaints resulting directly from a wireless carrier's practices in offering the CPP service. Finally, regulatory mandates for all LECs to provide CPP B&C service may actually have an unintended anti-competitive impact by curtailing market activity that could result in the emergence of other non-LEC based billing options.

¹² See Play-Bill: An Evaluation of the Customer Care and Billing Market, David Raezer of NationsBanc Montgomery Securities, July 1998.

Accordingly, with the incentives for multiple CPP billing options to be made available to wireless carriers, there is no need for the FCC to intervene by requiring that LECs provide billing and collection services.¹³ Illuminet respectfully submits that marketplace forces, which have been demonstrated in the interexchange B&C market to exist, should be allowed to develop the CPP B&C services that are required. Illuminet anticipates that LECs and other billing and collection arrangements will be established when the market demands such services. Marketplace forces should provide the proper incentives for all affected parties to take reasonable steps to make the CPP service work for the customer.

In the event that regulatory intervention into the CPP B&C marketplace is deemed necessary at this time, Illuminet requests that the FCC only confirm that, if a LEC provides CPP B&C services to one or more wireless carriers (or other entity on a wireless carrier's behalf), that LEC should be required to provide such services to all wireless carriers on a non-discriminatory basis.¹⁴ Confirmation of this minimal requirement, along with the continued provision of call validation information by the LEC, would not only ensure that one competing wireless carrier is not advantaged over another, but would also avoid introducing extraneous non-marketplace forces that could actually hinder the development of CPP B&C solutions.¹⁵

¹³ See *id.* at para. 61.

¹⁴ See *id.* at para. 62.

¹⁵ This approach would be consistent with the FCC's prior treatment of LEC-provided billing and validation services for alternately billed calls (e.g., calling card, third number and collect calls). See, e.g., In the Matter of Policies and Rules Concerning Local Exchange Carrier Validation and Billing Information for Joint Use Calling Cards, Report and Order and Request for Supplemental Comment, CC Docket No. 91-115, 7 FCC Rcd 3528 (1992). The

(Footnote Continued on Next Page)

III. Conclusion

As demonstrated above, Illuminet believes that an efficient technical solution is readily available that can be developed to address the billing issues raised by the Commission in its NPRM. Moreover, in light of the Commission's experience with B&C in the interexchange marketplace, the imposition of regulatory requirements associated with CPP B&C are not necessary at this time.

Respectfully submitted,

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application of these rulings would particularly be appropriate in this context since CPP calls, like interexchange alternately-billed calls, involve situations where the billing carrier does not typically have a direct pre-existing business relationship with the calling (or billed) party prior to the time the call is made.

CERTIFICATE OF SERVICE

I, Colleen von Hollen, do hereby certify that on this 17th day of September 1999, a copy of the attached Comments of Illuminet, Inc., in WT Docket No. 97-207, was hand-delivered to the following parties:

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